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APPLICATION N	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/621,417		07/18/2003	Hajime Motoyama	03500.017428. 2800		
5514	7590	08/25/2004	,	EXAMINER		
		CELLA HARPER &	PHAM, HAI CHI			
	OCKEFELLER PLAZA YORK, NY 10112			ART UNIT	PAPER NUMBER	
	,			2861	•	
				DATE MAILED: 08/25/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	AL
	10/621,417	мотоуама, најім	E
Office Action Summary	Examiner	Art Unit	
	Hai C Pham	2861	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence addre	9SS
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing - earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be to ly within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDON	imely filed  ays will be considered timely.  m the mailing date of this comm  IED (35 U.S.C. § 133).	nunication.
Status			
1) Responsive to communication(s) filed on	<u>_</u> .		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	s action is non-final.		
3) Since this application is in condition for allowa	ance except for formal matters, p	rosecution as to the m	erits is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-5 is/are pending in the application.			•
4a) Of the above claim(s) is/are withdra			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-4</u> is/are rejected.			
7) Claim(s) <u>5</u> is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin	er.		
10) The drawing(s) filed on is/are: a) acc		Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is o	bjected to. See 37 CFR	1.121(d).
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	e Action or form PTO-	152.
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119(	a)-(d) or (f).	
1.⊠ Certified copies of the priority documen	ts have been received.		
2. Certified copies of the priority documen	ts have been received in Applica	ation No	
<ol><li>Copies of the certified copies of the price</li></ol>	ority documents have been recei	ved in this National St	age
application from the International Burea	, , , , , , , , , , , , , , , , , , , ,		
* See the attached detailed Office action for a lis	t of the certified copies not receive	ved.	
Attachment(s)			
Notice of References Cited (PTO-892)	4) 🔲 Interview Summa		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	Paper No(s)/Mail	Date Patent Application (PTO-15)	52)
Paper No(s)/Mail Date <u>12/15/03</u> .	6) Other:		- <del>-</del> ,
D.A. T. J. J. T. J. J. C.			

#### **DETAILED ACTION**

### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (U.S. 5,739,940).

Kondo discloses a multi-beam scanning optical device comprising a first laser source emitting a first laser beam (semiconductor laser 2 emitting a laser beam  $L_2$  at a wavelength  $\lambda_2$  of 780 nm), a second laser source beam shorter in wavelength (semiconductor laser 1 emitting a laser beam  $L_1$  at a wavelength  $\lambda_1$  of 670 nm) and optical means (scanning lenses 6a and 6b) for directing the first laser beam and the second laser beam to a photosensitive member (photosensitive drum 5), the second beam having a longer optical path length to the photosensitive member than the first laser beam (col. 4, lines 61-66) (Fig. 3a further shows the laser beam having a shorter wavelength  $\lambda_1$  having a focus point farther than that of the laser beam having the longer

wavelength  $\lambda_2$ , indicating that the laser beam of shorter wavelength has a longer optical path length to the photosensitive drum).

Kondo further teaches said optical means (scanning lenses 6a and 6b) having lenses differing in refractive index from each other depending on wavelength (col. 4, lines 57-66).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Appel et al. (U.S. 5,371,526).

Kondo discloses all the basic limitations of the claimed invention except for the first laser source and the second laser source being provided in a semiconductor chip, and the adjusting means for adjusting the optical path lengths of the first and second laser beams.

Appel et al. discloses a multi-beam scanning optical device having a plurality of diodes (3, 4, 6, 8) emitting a plurality of laser beams of different wavelengths by pairs, the diodes being provided on the same semiconductor chip (Fig. 4), wherein the device includes an optical path length adjuster (85) for adjusting the optical path length of the

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light beams to keep the optical path length of the four diodes equivalent (col. 6, lines 16-61).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the device of Kondo with the optical path length adjuster as well as to configure the semiconductor lasers formed on a single chip as taught by Appel et al. The motivation for doing so would have been to correct the blurred picture caused by the chromatic aberration of the scanning lenses due to the difference of wavelengths among the laser beams as suggested by both Kondo and Appel et al.

#### Allowable Subject Matter

- 6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claim 5 is the inclusion therein, in combination as currently claimed, of the limitation "wherein said adjusting means has a rotating mechanism for rotating the semiconductor chip with substantially the centers of the first laser source and the second laser source as the center of rotation", which is not found taught the prior art of record considered alone or in combination.

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#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HAI PHAM

PRIMARY EXAMINER

Har Li Phan

August 21, 2004